

I CLAIM:

1. A dishwasher comprising:
 - (A) means for receiving power from a 110-120 volt, 15-20 amp power supply;
 - 5 (B) a washing chamber including at least one spray head and a recirculatory and reheating sump;
 - (C) a rack configured and dimensioned to be received within said washing chamber for holding kitchenware to be bathed, washed, rinsed and optionally cooled;
 - 10 (D) a vented water tank substantially disposed beneath said washing chamber;
 - (E) first means for providing communication between a fresh water supply providing water at no more than 140°F and said tank, and second means for providing communication between the fresh water supply and said washing chamber during selected ones of the bathe, wash, rinse and optional cooling cycles;
 - (F) actuatable preheat means for introducing water from said fresh water supply into said tank and for using power from the power supply to heat the received water in said tank to at least 190°F prior to discharging any heated water therefrom into said washing chamber during selected ones of the bathe, wash and rinse cycles; and
 - 20 (G) pump means using power from the power supply for forcing heated water from said tank into said washing chamber for spraying the heated water onto the kitchenware on said rack via said at least one spray head;
 - 25 said dishwasher having at least one of two alternative post-preheat cleaning modes as follows:
 - (i) a first cleaning mode including washing the kitchenware with water at at least 150°F during a wash cycle, and rinsing the washed kitchenware with water at at least 180°F during a rinse cycle, and

(ii) a second cleaning mode including washing the kitchenware with water at at least 165°F during a wash cycle, and rinsing the washed kitchenware with water at at least 165°F during a rinse cycle.

2. The dishwasher of Claim 1 including manually operable means for
5 actuating said preheat means.

3. The dishwasher of Claim 1 in operative communication with an otherwise distinct and separate actuatable cooking apparatus, said dishwasher including means for actuating said preheat means in response to activation of the cooking apparatus.

10 4. The dishwasher of Claim 3 wherein said operative communication is over-the-air or by a wire connection.

5. The dishwasher of Claim 4 including means for over-the-air sensing of operation of the cooking apparatus.

6. The dishwasher of Claim 3 wherein the cooking apparatus
15 includes a transmitter for transmitting a signal indicating actuation of the cooking apparatus, and said dishwasher includes a receiver for receiving said signal transmitted by the cooking apparatus transmitter.

7. The dishwasher of Claim 3 additionally including manually operable means for actuating said preheat means independently of the cooking
20 apparatus.

8. The dishwasher of Claim 1 wherein said pump means uses power from the power supply for forcing heated water from said tank into said washing chamber for spraying the heated water onto the kitchenware on said rack via said at least one spray head to at least in part bathe the kitchenware
25 during a bathe cycle.

9. The dishwasher of Claim 1 wherein said preheat means, upon actuation and prior to deactuation, operates for no more than 45 minutes.

10. The dishwasher of Claim 9 wherein said pump means discharges heated water from said tank into said washing chamber only subsequent to
30 deactuation of said preheat means.

11. The dishwasher of Claim 1 wherein said pump means pumps from said tank less than 1.5 gallons of heated water during the bathe cycle, about 1.5-2.0 gallons thereof in the wash cycle, and about 1.5-2.0 gallons thereof in each of two rinse cycles.

5 12. The dishwasher of Claim 1 wherein the first cleaning mode is completed within 15 minutes.

13. The dishwasher of Claim 1 wherein the first cleaning mode is completed within 30 minutes.

10 14. The dishwasher of Claim 1 wherein, during the first cleaning mode, water leaving said at least one spray head reaches at least 180°F.

15. The dishwasher of Claim 14 wherein, during the first cleaning mode, water leaving said at least one spray head reaches at least 185°-190°F.

16. The dishwasher of Claim 1 wherein, during any cleaning mode, the surface temperature of any glassware in the kitchenware is raised to above 15 160°F for no more than 9 minutes, thereby to minimize etching of the glassware.

17. The dishwasher of Claim 1 having at least one of two alternative post-preheat cleaning modes as follows:

(i) a first cleaning mode including washing the 20 kitchenware at a surface temperature of at least 150°F during a wash cycle, and rinsing the washed kitchenware at a surface temperature of at least 180°F during a rinse cycle; and

(ii) a second cleaning mode including washing the kitchenware at a surface temperature of at least 165°F during a wash cycle, and 25 rinsing the washed kitchenware at a surface temperature of at least 165°F during a rinse cycle.

18. The dishwasher of Claim 1 wherein the first cleaning mode provides at least 90,000 Heat Unit Equivalents, as defined by the National Sanitation Federation, and said second cleaning mode provides at least 150,000 30 Heat Unit Equivalents.

19. The dishwasher of Claim 1 wherein, during the first cleaning mode, the surface temperature of the kitchenware is raised to at least about 175-180°F during at least one of the wash and rinse cycles.

20. The dishwasher of Claim 19 wherein, during the first cleaning mode, the surface temperature of the kitchenware is raised to at least about 175°F during a rinse cycle.

21. The dishwasher of Claim 1 additionally including a post-rinse cooling cycle wherein the rinsed kitchenware on said rack is cooled using water from the fresh water supply via said at least one spray head.

22. The dishwasher of Claim 1 wherein said tank vents water vapor from within said tank into said washing chamber.

23. The dishwasher of Claim 1 wherein said tank has a fluid capacity of about 4.4-5.4 gallons of water.

24. The dishwasher of Claim 1 wherein said tank has a fluid capacity of about 5.5-7.0 gallons of water.

25. The dishwasher of Claim 1 wherein said preheat means, for a predetermined period after deactuation, also uses power from the power supply to maintain the heated water in said tank at at least 190°F, as necessary, prior to the initial discharge of any heated water therefrom into said washing chamber.